

Application Serial Number 10/522046
Response to Office Action dated 9/24/2007

REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

Claim 1 has been amended to include a composition of the glass as supported by the specification at page 4, lines 9-12; Page 5, lines 4 and 10-12; page 5, lines 27-28; and page 5, line 37 – page 6, line 8; page 8, lines 9-11; and laser processing property which was included in the original claim 6.

Claims 4 and 6-10 have been canceled without prejudice. Therefore, the rejections of these claims are moot. Applicants do not concede the correctness of the rejection.

Claim 11 has been added as supported by the specification at page 4, line 37 – page 5, line 5.

Claim 12 has been added as supported by the specification at page 4, lines 9-12; page 5, lines 4 and 10-12; page 5, lines 27-31; and page 7, lines 4-11.

Claims 1-3 and 5 have been rejected under 35 U.S.C. 102 (a) as being anticipated by Koyo et al. (US Patent Application Publication No. 2003/0100431). Applicants respectfully traverse this rejection.

Applicants submit a verified translation of the priority application of the present application, whose filing date of July 24, 2002 is prior to the October 3, 2002 effective prior art date of Koyo. Therefore, the rejection of claims 1-3 and 5 should be withdrawn.

Claims 1, 2, and 5 have been rejected under 35 U.S.C. 102 (b) as being anticipated by Krashkevich et al. (US Patent No. 5,039,631). Applicants respectfully traverse this rejection.

Krashkevich discloses that the content of TiO_2 is between 0 – 5 mol% (see Table 1), and that the total amount of all colorant additives including TiO_2 is less than 5 mol% (see Table 4). In contrast, claim 1 of the present invention requires at least 10 mol%. In addition, Krashkevich requires no more than 5 mol% of TiO_2 in a glass and prefers a glass without TiO_2 (see Table 1).

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However, in order to decrease the laser processing threshold value, the glass in the present invention needs to contain a large amount of TiO_2 (see page 8, lines 32-33 of the specification), and accordingly, claim 1 requires no less than 10 mol% of TiO_2 in a glass. Moreover, the purpose of Krashkevich is to provide particular content of a lanthanoid in order to strengthen the glass (see coln. 1, line 57 - coln. 2, line 21 including Table 1). Therefore, claim 1 is distinguished from Krashkevich, and accordingly, the rejection of claims 1, 2, and 5 should be withdrawn.

Claims 1-3, and 5 have been rejected under 35 U.S.C. 102 (b) as being anticipated by Mader et al. (US Patent No. 4,444,893). Applicants respectfully traverse this rejection.

Applicants understand the Mader reference is US Patent No. 4,444,893 instead of US Patent No. 5,039,631 as recited in the rejection. Unlike other tables in the reference, which disclose compositions in terms of weight% of components and thus, are not directly comparable to the present claims, Tables 4 and 6 of Mader use mol%, like the present claims. It can be seen that no example satisfies all the content requirements of claim 1. The total contents of alkali metal oxides and alkali earth metal oxides in all examples in Tables 4 and 6 except for Examples 11 and 14-16 are higher than the upper limit of claim 1, 20 mol%. The Na_2O contents of Examples 11 and 14-16 are lower than the lower limit of claim 1, 10 mol%. Therefore, claim 1 is distinguished from Mader, and accordingly, the rejection of claims 1-3, and 5 should be withdrawn.

Claims 1-3 and 5 have been rejected under 35 U.S.C. 102 (b) as being anticipated by Wu et al. (US Patent No. 4,567,104). Applicants respectfully traverse this rejection.

Wu discloses a glass comprising a body portion and an ion exchange surface layer, which contains a high concentration of Ag^+ ion (see coln. 4, lines 16-19). During the ion exchange treatment, the glass contacts Ag^+ ion-containing material and/or an aqueous solution containing Ag^+ ion and is heated with them to form AgCl -containing and/or Ag_2O -containing and/or Ag^+ ion containing microcrystals and/or microphases within the ion exchanged surface layer (see coln. 4, lines 39-48). As a result, the glass surface at least 0.1 micrometer from the surface in thickness dimension is ion-exchanged (see coln. 4, lines 54-56). In contrast, claim 1 of the present invention requires a substantially uniform glass in a direction of thickness. Moreover, Wu includes TiO_2 as a RS (radiation sensitivity)-suppression agent (see coln. 20, lines 52-56) and a photosensitivity-

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inhibitor (see coln. 23, lines 49-53). In the present invention, however, claim 1 requires at least 10 mol% of TiO_2 and provides a composition that has a reduced laser processing threshold value (see page 5, lines 10-12 of the specification). Thus, the composition of claim 1 has properties opposite what would be expected from the reference teaching. Therefore, claim 1 is distinguished from Wu, and accordingly, the rejection of claims 1-3 and 5 should be withdrawn.

Claims 1-3 and 5 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 4 and 16 of copending Patent Application No. 10/262864. Applicants respectfully traverse this rejection.

Applicants attach herewith a terminal disclaimer. Therefore, the rejection of claims 1-3 and 5 should be withdrawn. Applicants do not concede the correctness of the rejection.

Claims 1-3 and 5 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Patent Application No. 10/541175. Applicants respectfully traverse this rejection.

Applicants attach herewith a terminal disclaimer. Therefore, the rejection of claims 1-3 and 5 should be withdrawn. Applicants do not concede the correctness of the rejection.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.



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